

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (previously presented) A power splitter device comprising:

a power input port;

at least three power output ports each having a separate, resettable overcurrent protection circuit, each of said overcurrent protection circuits having its own maximum current rating; and

a port switch configured to provide power from said input port to selectable combinations of one or more said output ports, including at least one combination of two or more said output ports, said port switch restricted from selecting all said output ports simultaneously.

2. (previously presented) A device in accordance with Claim 1 wherein said port switch is further configured to restrict selection of any combination of said output ports having overcurrent protection circuits with maximum current ratings totaling more than a preselected maximum current.

3. (previously presented) A device in accordance with Claim 2, wherein a highest of said maximum current ratings of said overcurrent protection circuits is equal to said preselected maximum current.

4. (previously presented) A device in accordance with Claim 2, wherein:
one of said overcurrent protection circuits is a high current circuit having a
highest maximum current rating; and
said port switch is configured to provide current to said output port having the
high current circuit only in combination with no other said output port.

5. (original) A device in accordance with Claim 1 wherein said ports are
selected from the group consisting of 12 VDC power connectors and ARINC 628
connection points.

6. (original) A device in accordance with Claim 1 wherein said resettable
overcurrent protection circuits are user-replaceable.

7. (previously presented) A power distribution system comprising:
a power source configured to provide power to a plurality of seat connectors;
a branch level overprotection circuit having a maximum current rating and
providing overcurrent protection for current drawn in a branch of said system comprising
a plurality of seat connectors; and

a power splitter device having a power input port configured to receive power
from one of said seat connectors, at least three power output ports each having a
separate, resettable port level overcurrent protection circuit, each of said overcurrent
protection circuits having its own maximum current rating; and a port switch configured
to provide power from said input port to selectable combinations of one or more said
output ports, including at least one combination of at least two said output ports, said
port switch further configured to restrict selection of all said output ports simultaneously.

8. (previously presented) A system in accordance with Claim 7 wherein said
port switch is further configured to restrict selection of any combination of said output
ports having port level overcurrent protection circuit with maximum current ratings
totaling more than a prorated seat connector share of said maximum current rating of
one of said branch level overcurrent protection circuits.

9. (previously presented) A system in accordance with Claim 8, wherein a
highest of said maximum current ratings of said overcurrent protection circuits is equal
to said prorated seat connector share.

10. (previously presented) A system in accordance with Claim 9, wherein:
one of said port level overcurrent protection circuits is a high current circuit
having a highest maximum current rating; and
said port switch is configured to provide current to said output port having the
high current circuit only in combination with no other said output port.

11. (original) A system in accordance with Claim 7 wherein said input port
and said output ports are selected from the group consisting of 12 VDC power
connectors and ARINC 628 connection points.

12. (original) A system in accordance with Claim 7 installed on a mobile
platform.

13. (previously presented) A system in accordance with Claim 12 wherein the
mobile platform comprises an aircraft.

14. (previously presented) A method for supplying power to a plurality of passenger devices at a passenger seat of a mobile platform, said method comprising:

providing at least three output ports coupled a port switch configured to selectively power said output ports including at least one combination of two or more output ports from a seat connector, wherein each output port has a separate overcurrent protection circuit having a maximum current rating; and

restricting the port switch from selecting combinations of output ports having overcurrent protection circuits with maximum ratings having a total greater than a preselected maximum current.

15. (original) A method in accordance with Claim 14 wherein the preselected maximum current is a prorated seat connector share, and further comprising the step of determining a prorated seat connector share.

16. (previously presented) A method in accordance with Claim 14 wherein the mobile platform comprises an aircraft.

17. (original) A method in accordance with Claim 14 further comprises replacing at least one of the overcurrent protection circuits with another having a different maximum current rating.

18. (previously presented) A power splitter device comprising:

a power input port;

at least three power output ports each having a separate, resettable overcurrent protection circuit, each of said overcurrent protection circuits having its own maximum current rating and wherein one of said overcurrent protection circuit is a high current circuit having a highest maximum current rating; and

a port switch configured to provide power from said input port to selectable combinations of one or more said output ports, including at least one combination of two or more said output ports, and further configured to prevent power from being applied to all said output ports simultaneously, to prevent power from being applied to any combination of said output ports having overcurrent protection circuits with maximum current ratings totaling more than a preselected maximum current, and to provide current to said output port having the high current circuit only in combination with no other output port.

19. (previously presented) A power distribution system comprising:
a power source configured to provide power to a plurality of seat connectors;
a branch level overprotection circuit having a maximum current rating and
providing overcurrent protection for current drawn in a branch of said system comprising
a plurality of seat connectors; and

a power splitter device having a power input port configured to receive power
from one of said seat connectors, at least three power output ports each having a
separate, resettable port level overcurrent protection circuit, each of said port level
overcurrent protection circuits having its own maximum current rating, wherein a highest
of said maximum current ratings of said port level overcurrent protection circuits is equal
to said a prorated seat connector share and is a high current circuit having a highest
maximum current rating;

and a port switch configured to provide power from said input port to selectable
combinations of one or more said output ports, including at least one combination of at
least two said output ports, said port switch further configured to prevent power from
being applied to all said output ports simultaneously, to prevent power from being
applied to any combination of said output ports having port level overcurrent protection
circuit with maximum current ratings totaling more than said prorated seat connector
share of said maximum current rating of one of said branch level overcurrent protection
circuits, and wherein said port switch is configured to provide current to said output port
having the high current circuit only in combination with no other said output port.